



Asparagus soup

by Nicholas Negroponte

Many years ago in Stowe, Vermont, Tom Watson, Jr. (former IBM chairman) and Olive Watson served lunch to Jerome Wiesner (former MIT president) and his daughter. The first course was asparagus soup, which Jerry's daughter liked so much that he later requested and received the recipe.

Not long after, as part of its antitrust investigations of IBM, the U.S. Justice Department subpoenaed a large number of MIT files in its attempt to prove that illegal practices existed in the relationship between our two institutions. The files proved useless, until the recipe for asparagus soup was discovered. It was seriously deemed to be a coded message.

This story never failed to make Jerry laugh and became part of his many fond memories and close affection for IBM. In 1979, when the idea of the Media Lab was born, Jerry turned first to IBM. I remember Frank Cary's (a later IBM chairman) personal enthusiasm, which gave such enormous encouragement. However, IBM had strict rules against contributing to bricks and mortar and could not participate in building the Lab. We got a rain check, instead.

That rain check was cashed in 1984, when the Media Lab barely existed. During the first year, IBM provided almost 50 percent of our funding. Ever since, measured in any way, IBM has been the Media Lab's largest, most long-standing, and most active sponsor. For this reason it is fitting for Media Lab folks to assemble in a single issue of the *IBM Systems Journal*, with papers written by faculty, staff, students, and alumni. We have never before come together in this fashion.

Counterculture

In 1979, computer science was preoccupied with the goals of operating systems, languages, and networks—all noble, but conspicuously missing any focus on the human-computer interface. Subjects like computer graphics were considered to be sissy science and decidedly not the “right stuff.” How can we make computers easier to use? That was the founding question of the Media Lab.

One answer was to design computers whose use would be a more creative experience—by adding the richness of video (the entertainment industry), the depth of information (the publishing industry), and the intrinsic interactivity of computation—bringing them all together. “Convergence” was not a fashionable word. In fact, it was considered plumb crazy.

It took five years to build the Media Lab (1979–1984), a very interesting five-year period in history. Three important things happened between developing the idea and opening our doors for business. For one, the personal computer industry was born. For another, the human interface moved to center stage. For yet another, divestiture

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transformed America's telecommunications landscape. Given these three developments, we were squarely in the right place and at the right time.

Many people ask me why there are no media labs at other universities. The answer is simple. MIT did not have an art department, an education school, a film and animation school, or a graduate program in music, let alone a human factors or ergonomics program. So it was relatively easy to pull those pieces into one center without threatening someone else's turf.

Differences

The Media Lab is different from other MIT labs in three ways: funding, staffing, and academics.

The Lab is funded almost exclusively by industries: 50 percent American, 25 percent European, and 25 percent Far Eastern. Corporate sponsors represent a mix of interests, typically those of telecommunications, computer, and media companies, with some interesting exceptions like LEGO Systems (our second most long-standing sponsor). More recently, the Lab has attracted the likes of Federal Express, Levi Strauss, Nike, Steelcase, Swatch, and Volvo as part of a new consortium, creating a corporate mix that is even more dramatic.

The Lab began as a *salon des refuses*, the coming together of faculty and staff who no longer fit their host departments. A collection of people assembled, who complemented yet did not compete with one another. Today, roughly half of the Lab is composed of hard-core computer scientists while the other half is composed of filmmakers, musicians, designers, anthropologists, and, more recently, physicists. This mix is not one that can be easily replicated in industry, particularly given the arts component.

The Media Lab enjoys the anomalous status of behaving like both church and state. Typically, MIT is divided into academic departments and interdisciplinary labs. Roughly speaking, the former have all the power and the latter have all the money. While these checks and balances serve MIT well, we felt it was important for the Media Lab to be able to admit students, hire faculty, and award degrees for the simple purpose of attracting people not usually attracted to, let alone normally admitted by, MIT. This is surely our most valuable difference.

Success is our worst enemy

The Lab grew over 50 percent each year during its first five years. A topic like multimedia, considered nutty in the early '80s, was suddenly so hot in the late '80s, that such unlikely bedfellows as phone companies and movie studios were scrambling to put together joint ventures. The word "multimedia" lost its hyphen, was found on the front of annual reports and in corporate jingles, and became part of the name of new subsidiaries as well as senior staff positions.

Whatever multimedia meant to people, it meant it to a lot of them. IBM was one of the first to adopt the name and move forward aggressively. IBM and the Media Lab worked very closely under the aegis of Walter Bender. At one point, someone from the Media Lab flew to IBM's site at Boca Raton once a week.

As we entered the '90s multimedia began to be commonplace. Many start-ups were developing exciting titles with fine production values. The world was doing a perfectly good job without us. One of the most difficult things to know is when to get off a bandwagon you have created. Not easy for untenured faculty, who depend on world fame and recognition in order to graduate to the tenured ranks.

In December 1994, the Media Lab decided to move forward in at least one new direction. "Things That Think" was born. It was as if we were returning to atoms, now that we had the world convinced that bits were bits. What is so remarkable about this initiative is the new talent that it has attracted to the Lab. This does not foreclose innovation in the more seasoned Media Lab consortia such as "News in the Future" or "Television of Tomorrow." It just makes the place a little more different.



Management?

Today the Lab is composed of about 350 people (who draw one kind of salary or another), 160 companies (who sponsor research in many different ways), and just over 100 projects (which have names, objectives, and people). When executives visit the Lab they see different qualities in different projects. In the same day, one company can find extraordinary relevance in something that the next company finds silly. The difference is in the eyes of the beholders. But what every visitor observes, without exception, is that the faculty, staff, and students exude an unbelievable level of passion and excitement, across the board. This is an around-the-clock, seven-days-a-week operation, where prime time tends to be when most others sleep.

I am often asked, “Why can’t my lab, my employees, or my child be as motivated?” The answer is simple. At the Media Lab we don’t tell anyone what to do. There are now enough companies and enough Media Lab people that I defy any smart student to do something for which I cannot find corporate interest. Similarly, in all that is going on, any company can find relevance if it is willing to work at it.

Many academics think that corporate funding will be more shortsighted than government grants and that companies will want their hands on the wheel all the time. Both concerns could not be further from the truth. As soon as corporations realize that what they are doing is outsourcing very basic research, the formula clicks into place. Media Lab people are constantly challenged and egged on by companies and by each other, but never told what to do by anyone. Love is indeed a better master than duty.

Is this the right way to run a lab? I think so. You decide when you finish reading this issue.

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